

January 14, 2008

Dear Light Brown Apple Moth Environmental Advisory Task Force Members:

In our last meeting, a question was raised about surfactant in the Light Brown Apple Moth program's aerial spray mixture and in the Checkmate LBAM-F formulation. I have checked with the program's operational personnel and they have confirmed that no surfactant or dye is added to the spray mixture; it is only Checkmate LBAM-F and water. They also confirmed that the color of the spray mixture is "milky." In addition, I have checked with Dr. Jim E. Warren of the USDA and he confirms that there is no protein and no surfactant in the formulated product.

On October 20, Governor Schwarzenegger directed the CDFA to make public the list of all the ingredients in the formulated product. While some of these ingredients, being salts or alcohols, could affect the surface tension of water, none are considered surfactants. The list is as follows, with some comparisons of the compound names to everyday products and uses.

- 1) Water—the main ingredient.
- 2) (E)-11-Tetradecen-1-yl Acetate—the pheromone.
- 3) (E,E) -9, 11 Tetradecadien-1-yl Acetate—the pheromone.
- 4) Ammonium phosphate—commonly used in "crystal growing" kits for children and as a plant nutrient.
- 5) 1, 2-benzisothiazol-3-one—used as antibacterial and antifungal agents in a variety of products.
- 6) 2-hydroxy-4-n-octyloxybenzophenone—used in sunscreen and in lots of products made of plastics, including food containers; useful for its ultraviolet light -blocking properties.
- 7) Crosslinked polyurea polymer—commonly used in manufacturing of plastics such as polyurethane foam production, waterproofing, insulation, and micro-encapsulation agent for pesticides.
- 8) Butylated Hydroxytoluene—common food preservative.
- 9) Polyvinyl Alcohol—Odorless, non-toxic polymer commonly used in shampoos and cosmetics, feminine hygiene and incontinence products, children's play putty, glue, lubrication drops for hard contact lens wearers and other products.
- 10) Tricaprylyl Methyl Ammonium Chloride—commonly used in the manufacture of various pesticides and pharmaceuticals; contributes to product purity.
- 11) Sodium Phosphate—a sodium salt, naturally occurring substance important in every cell in the human body, helps regulate acidity. Sodium phosphate is also an additive in egg products and is a prescribed laxative prior to procedures such as colonoscopy.



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In regard to the pheromone itself, Dr. Warren said this: "From an oral toxicity standpoint the LD₅₀ [dose lethal to 50 percent of test organisms] values for pheromones to birds is greater than 2000 mg/kg meaning that the birds could not ingest enough to reach levels that would cause mortality."

I have invited Dr. Warren to speak at our February 21st meeting.

Please contact me if you have any questions.

Sincerely,



Robert Leavitt
Executive Secretary